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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/525,898	03/15/2000	Torgny Palenius	040070-922	9354

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EXAMINER	
LEE, CHI HO A	

ART UNIT	PAPER NUMBER
2663	13

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/525,898	PALENIUS, TORGNY	
	Examiner	Art Unit	
	Andrew Lee	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-8 and 12-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-8 and 12-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *12*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2-7, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Umeda et al U.S. Patent Number 5,420,850.

Re Claim 2, fig. 1 teaches a base station transmitting a composite signal (See col. 4, lines 46-60) comprising of plurality of PN channels (a set of codes) to the mobile receiver wherein the interference level detector 24B of the mobile estimates interference of the desired channel (reserving at least one code interference....only) wherein the desired channel is Control Channel associated with an PN spreading code in the control channel measurement mode (See col. 5, lines 28-48 & col. 6, lines 23-42).

Re Claims 3 and 14, refer to Claim 1, wherein the Control Channel carries control information and not traffic data (does not contain data spread).

Re Claims 3 and 14, refer to Claim 1, wherein the Control Channel carries control information and not traffic data (does not contain data spread).

Re Claim 4, the base station broadcasts a control channel that identifies the communication channels to the mobile (See col. 5, lines 20-28).

Re Claim 5, fig. 1 teaches the mobile 20 comprising a receiver 21 and Correlation Detector 22 collectively for receiving and dispreading the spreaded signals (at least one channelization code) from the base station; PN code generating part 23 (a reserved code) are read out under control by by Cont 25 (a processor) that is used by interference detector 24B for estimating interference (See col. 6, lines 26-41).

Re Claim 6, refer to Claims 4 and 5, wherein the control channel identifies control channel information (said reserved code) that is used by the Cont 25 in a control channel receiving level measuring mode. Furthermore, fig. 1 is implemented using CDMA air interface.

Re Claim 7, refer to Claim 4, wherein the control channel includes traffic channels CH1~CHm.

Re Claim 12, further teaches that the mobile stores (a memory) information about the control channels (said reserved code) of adjoining cells (See col. 9, lines 30-40).

Re Claim 13, refer to Claim 12.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda et al U.S. Patent Number 5,420,850 in view of Kato et al U.S. Patent Number 5,583,851.

Re Claim 8, Umeda et al teaches how the mobile compares the respective spreading codes between cells to determine the one cell in which the mobile station is currently located based on the spreading code corresponding to the comparison signal having the highest level of signal quality. Afterworth, communication between the mobile and radio-communication system can be made by the mobile.

Umeda et al fails to explicitly teaches "said code associated with said traffic channel is selected based upon a desired user bit rate for a connection ..".

Kato et al teaches a mobile unit which can transmit information at a high-bit rate by allocating a plurality of channel numbers to a user who requires a high-bit rate communication (See col. 4, lines 20-46 & col. 5, lines 23-46). The control channel in Umeda et al provide information regarding the traffic channels that are used to transmit information to respective mobile stations from the base station. This would suggest that information regarding idle channels is available to the mobile station. As disclosed by Kato et al, plurality of channels/codes are allocated to user based on the required/desired high-bit rate. One skilled in the art would have been motivated by Kato et al to select traffic channels based on the desired user bit rate to improve throughput.

Therefore, it would have been obvious to one ordinary skilled to incorporate the teaching of Kato et al into the teaching of Umeda et al.

Response to Arguments

5. Applicant's arguments filed 12/3/03 have been fully considered but they are not persuasive.

Re Claims 2, 4-7, and 12-13, Applicant argues that Umeda fails to disclose or suggest estimating by reserving at one code in a set of codes for interference measurement only.

However Examiner respectfully disagree.

In Umeda, it is clear that the base station reserves a particular PN code from a set of PN codes for broadcasting Control Channel information. The Control Channel associated with a particular PN code is received and despread by the mobile to estimate interference level (See O.A. Paragraph 2). In the mobile, the Interference Level detector 24 A and 24 B estimate the interference level based on the corresponding spreading code and it this the case the particular PN code for the control channel for each base station. Since, the mobile station estimates the interference for the corresponding PN for the control channel, "reserving at least one code..for interference measurement only;" is anticipated.

Re Claims 3 and 14, Applicant argues that the Umeda fails to teach or suggest "received signal that does not contain data spread with the reserved code".

However, the control channel carries control information and no traffic data.

Re Claim 8, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

AI
2/3/04

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600